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Taplow, Maidenhead, Berks. SL6 0DF.
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email: taplow@generationuk.co.uk

Safety Check List

1. Is the scaffold/supporting structure completed and ready for the Stairtower?
2. Is the ground condition adequate to take the load imposed?
3. Is the correct equipment on site?
4. Is the equipment in good working order?
5. Is the correct Personal Protection Equipment available and in good working order?
6. Are all the components in their correct position and all locking catches engaged?
7. Is the Stairtower adequately braced and anchored?
8. Have any items been removed?

Health and Safety at Work Act, 1974

HAKI equipment is designed to meet the requirements of the above Act, Section 6.

It is also the customer's responsibility to comply with the requirements of this Act, particularly to use the equipment in accordance with current codes of practice and in ensuring that components are in good working condition prior to each use. We are able to provide assistance and advice on matters relating to safe and proper use of HAKI equipment.

Generation hire & sale

FREEPHONE 0800 783 8376

Trinity Street, Off Tat Bank Road, Oldbury, West Midlands. B69 4LA.
Telephone. 0121 543 2950. Fax. 0121 543 2951.
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Generation/BP1.10/04

Generation

HAKI Stairtower

User's Guide

Generation hire & sale

General

HAKI Stair Tower is made from pre-fabricated components. The stair tower is built using standards, and ledger beams . Other stair tower components include stair flights, landings, handrail and guardrails. The stair tower can be built as a separate construction or integrated into other scaffolding or staging. All components are of galvanised steel.

Marking

All components with the exception of locks, bolt pins etc. come permanently marked with the HAKI logo and the year of manufacture (2 figures). (For example: 98)

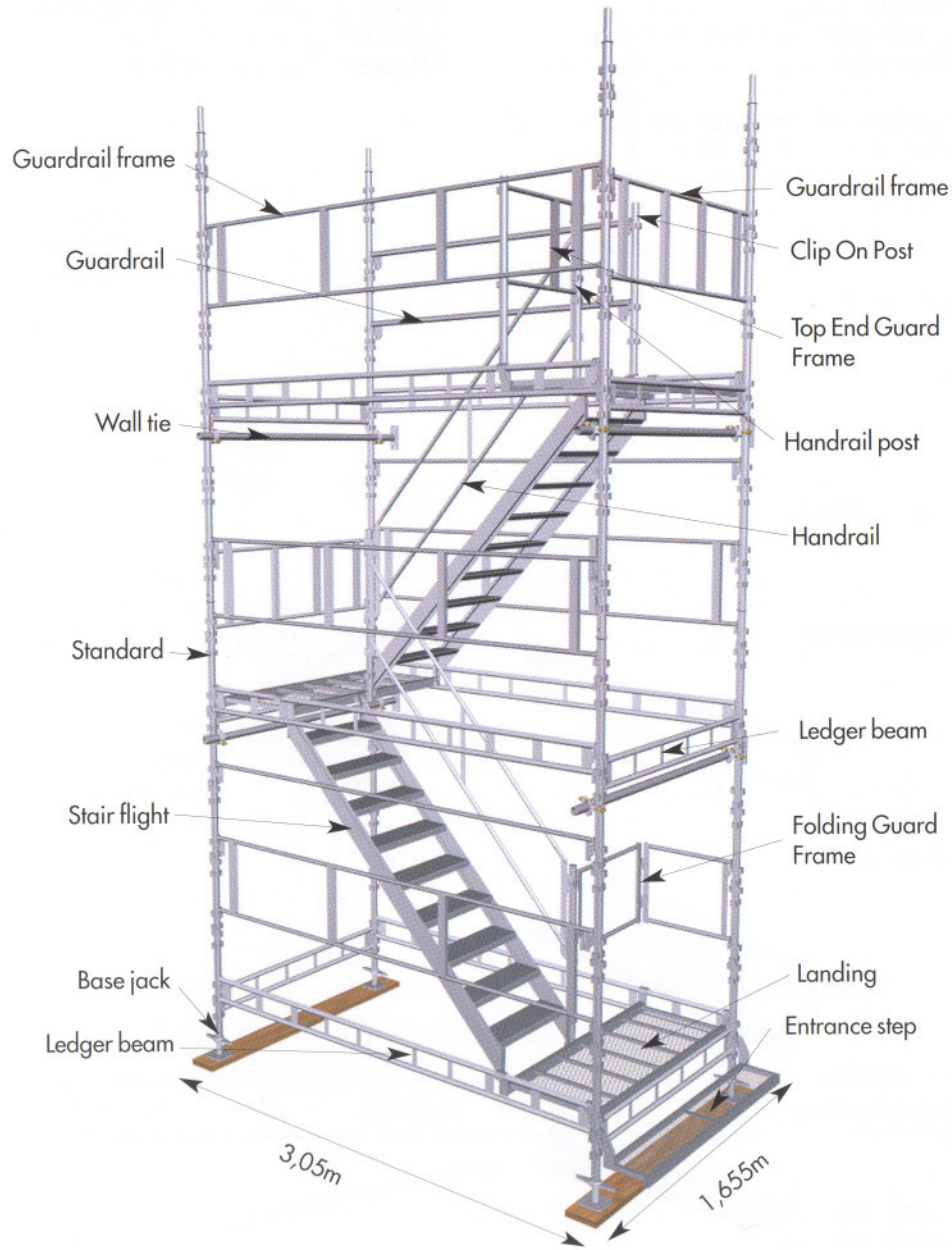
WARNING

ALL INFORMATION CONTAINED IN THIS MANUAL APPLIES ONLY TO COMPONENTS MANUFACTURED AND SUPPLIED BY HAKI.

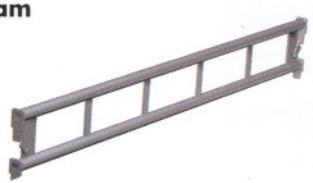
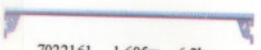
ANY COMPONENTS ORIGINATING FROM OTHER SOURCES WHICH ARE INCORPORATED INTO A STRUCTURE WILL INVALIDATE THIS INFORMATION.
IN SUCH CASE, HAKI HAS NO PRODUCT LIABILITY.

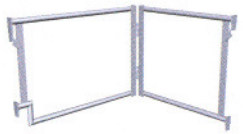
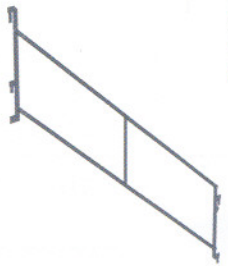
BY MIXING COMPONENTS OF OTHER MANUFACTURE THIS MAY INVALIDATE INSURANCE POLICY COVER.

Published May 2003
subject to change
Customers´ responsibility to check for changes



Article numbers and weights are for galvanized options unless otherwise stated. Please refer to HAKI price list for the corresponding details for painted options.

Name	Art. No.	Size	Weight (kg)
Base Jack	1091001		4.7
Standard	7017051	0.5m	3.3
	7017101	1.0m	6.0
	7017151	1.5m	8.6
	7017201	2.0m	11.3
	7017301	3.0m	16.7
Locking Pin	5141256		0.3
Ledger Beam 	7021160	1.605m	10.2
	7021300	3.0m	18.8
1.6m Ledger Beam has been replaced with a 1.6m Single Tube Beam. This change has no effect on the strength of the tower 	7022161	1.605m	6.3kg
Landing	7095000		29.1
Entrance Step	7103160		15.1

Name	Art. No.	Size	Weight (kg)
Folding Guard Frame 	1122191		9.2
Stair Flight	7101100	1.0m	35.3
	7101150	1.5m	33.6
	7101200	2.0m	42.1
Handrail Post	7015100		4.9
Stair Handrail 	1211136	1.0m	10.5
	1222231	1.5m	12.5
	1222222	2.0m	13.8
Guardrail	8742160	1.605m	6.4
	8722216	2.16m	8.0
	8722300	3.0m	11.0

LIST OF COMPONENTS

Name	Art. No.	Size	Weight (kg)
Guardrail Frame	7052160	1.605m	10.9
	7052300	3.0m	15.4
Diagonal Brace	7122160	1.605 (L=2.34m)	9.8
	7121300	3.0m (L=3.49)	15.6
Top End Guard Frame	7053000		7.3
Clip On Post	7015000		6.6
Erection Platform	2091316	1.605x0.6m	15.0

GENERAL NOTES

HAKI Stair Tower

All HAKI Systems have been designed to conform to current British and European Standards. The loading criteria contained in this manual have been calculated according to current British Standards.

Base Jacks

The stair tower is mounted on Base Jacks which are adjustable in height. This means the standards can always be adjusted to ensure that the beams are horizontal.

Standards

Standards of 3m and 2m in length are used wherever possible. Shorter standards may be used as top standards.

Beams

The stair tower is built using 1.605m and 3.0m ledger beams, with 2.0m, 1.5m or 1.0m between the platforms depending on which stair flight is used.

Anchorage

The stair tower must be anchored to the structures at each platform level on both sides (inner and outer standards) using scaffold tube and couplers - see Page 15.

Permissible Loads On Standards

When calculating the permissible loads on standards, the following values apply, provided that all other requirements are fulfilled. Stair tower with 2.0m stair flights 34kN per standard.

Special Solutions

For scaffolding constructions not covered by this User's Manual, please contact the HAKI Technical Department.

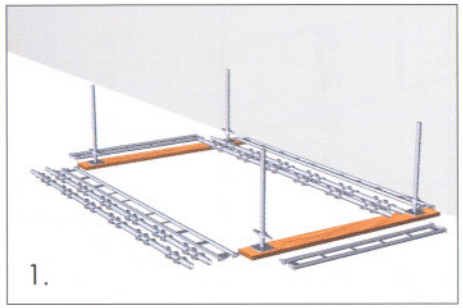
Number of persons permitted

Stairtower Height	Max Persons*
8	74
10	91
12	108
14	125
16	127
18	125
20	122
22	119
24	116
26	114
28	111
30	108
32	106
34	103
36	100
38	97
40	95
42	92
44	89
46	87
48	84
50	81

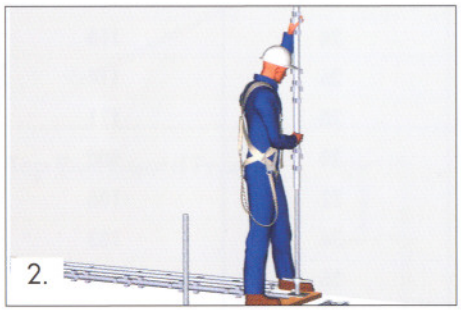
For heights over 50m, consult HAKI Technical Department

* Based on max. 100kg per person

Note: Prior to starting erection, determine position of tower. Always start with stair flight for clockwise direction of ascent.
BEFORE STARTING ERECTION, ALWAYS CHECK WHERE ACCESS POINTS ARE REQUIRED.
ALWAYS ENSURE THAT SIDE ACCESS POINTS ONLY OCCUR IN 2m LIFTS !


1.

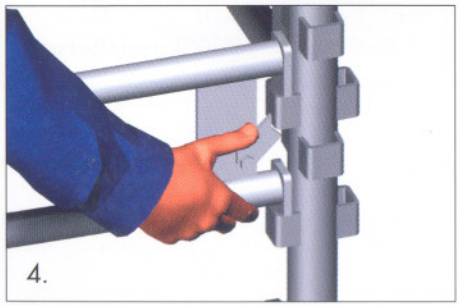
For base jacks as shown. Set out sole plates and base plates at position of standards, ledger beams and transom beams. Place base jacks onto sole plates, adjust to estimated final height.


2.

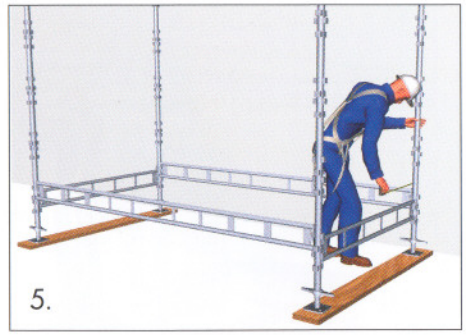
Place standard on base jacks, ensure that pockets are running in direction as shown (low pocket, 1.605m direction, high pocket 3.0m position).

3.

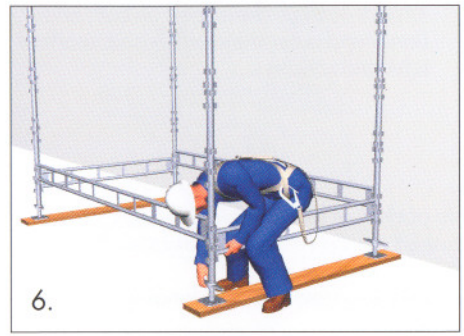
Connect 3.0m ledger beam to higher level pockets. Connect 1.605m ledger beams to lower level pockets.


4.

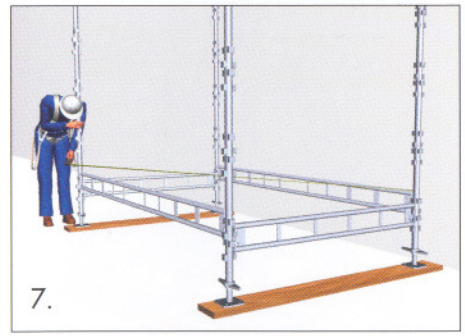
Engage all locking catches as you proceed.


5.

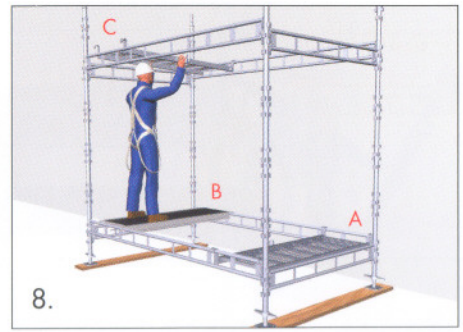
Check distance from structure.


6.

Level 1st lift following clockwise direction. Level by adjusting base jacks as necessary.


7.

Check base lift is square using a tape measure.

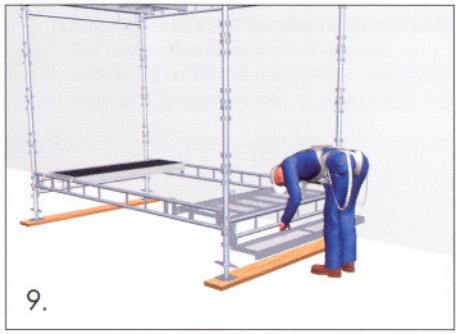


8.

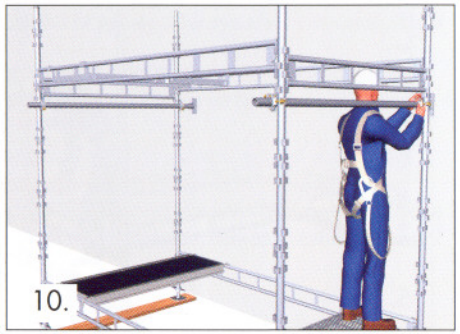
Place 1st landing,A, on ledger beams as shown (fig 8).Place Erecting Platform,B, at opposite end of bay (foot lift).

Install 2nd level of ledger beams.(Check drawing for 1.5m or 2.0m lift heights). Next landing,C, is located by working off Erecting Platform,B.

The landing on this lift, and all further lifts, are initially positioned on ledger beams approximately 0.5m from end of bay.

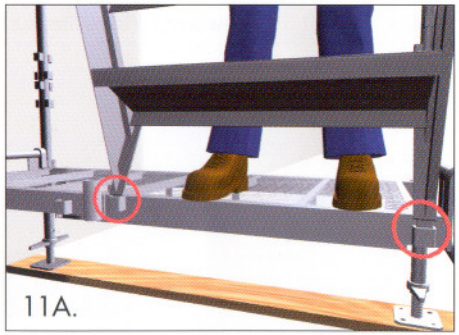


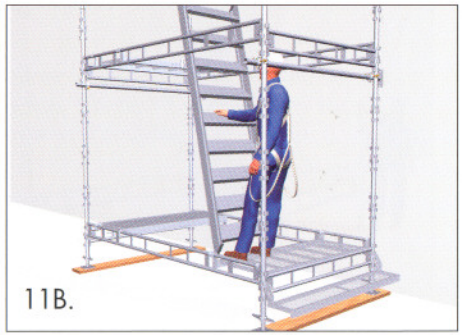
Fit entrance step to tower.

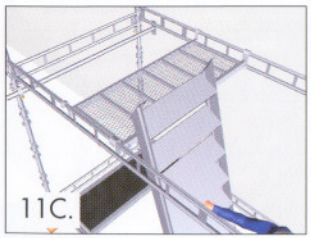


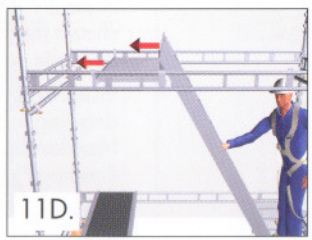
The stair tower must be anchored to the structures at each platform level on both ends (inner and outer standards) using scaffold tube and couplers.

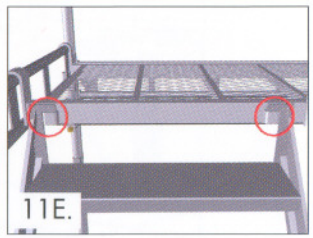
Stair flight is positioned vertically and located into pockets of lower landing (11A & 11B). Flight is then lowered onto landing above (11C) and pushed along (11D) until top of stair flight is fully located into pockets of upper landing (11E).
Note. At this stage check top and bottom of stair is fully engaged into both landing pockets.
Stairflights should be erected for a clockwise ascent.



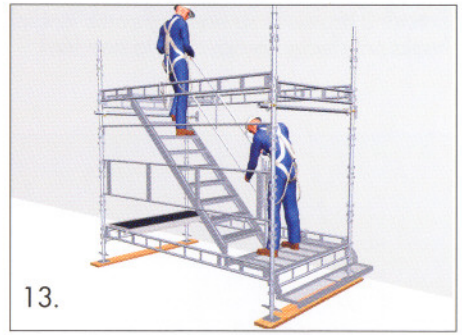






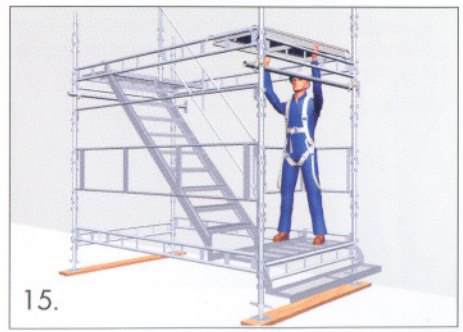


Fit Guardrail Frames and Guardrails to the outside face of the stair flight.



Uppermost erector clips to mid point of ledger beam. Both erectors then fix Stair Handrail Post into top and lower landings. Then, Stair Handrail is located into pockets of posts and locking catches engaged.

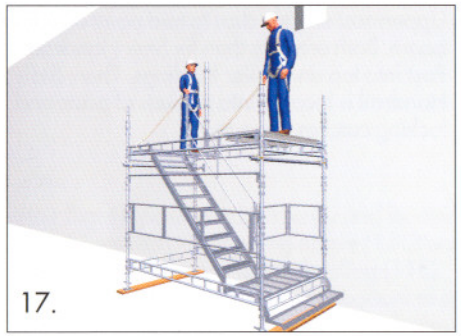
Fit Folding Guard Frame into handrail post and standard at entrance of stair.



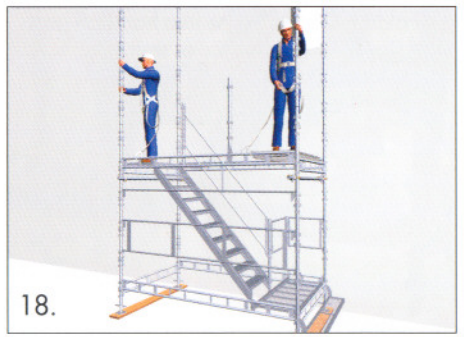
Re-position Erecting Platform onto next lift directly above lower landing.

Erector 1 proceeds up stair flight and fits temporary Clip-On Post to ledger beam close to erecting platform. Erector 1 then hooks to ledger, and, using clip-on-post for support, he climbs onto Erecting Platform.

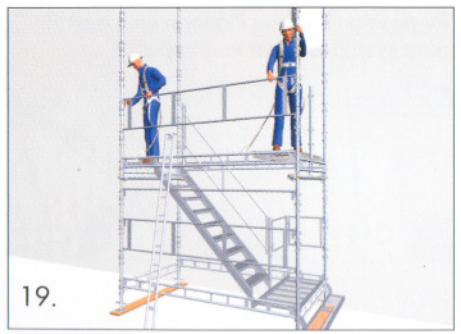
Note: Clip-On Post is only used to facilitate climbing to exposed landing



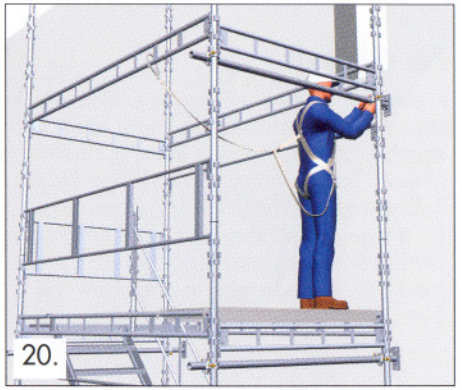
Erector 2 proceeds up stair flight onto landing, hooks onto ledger beam close to standard.



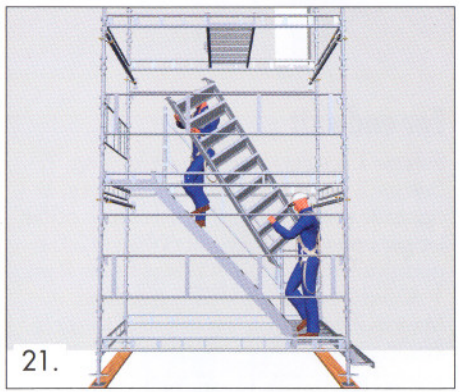
Next standards are added to all four legs. Temporary Clip-On Post may now be removed to a safe place until it is required again – eg end 1.605m ledger beam.



Fit Guardrail Frames to face and end of tower as shown. Fit ledger beams to next lift required (1.5m or 2.0m). Re-hook to upper ledger near standards.



NB:Ties should be fitted to structure and tower at each level before erecting next lift.



For further lifts repeat procedures 8, 11-13, 15-20 until reaching final exit level or mid exit points.

Entrance/exit at top of tower.

Erector 1 is safely standing on landing and hooked on to centre of 1.605m ledger beam, fits 3.0m guardrail frame with Erector 2 safely standing on erecting platform at opposite end of tower, hooked onto 1.605m ledger beam. Erector 1 then fits Top Guard Frame into hand-rail post and landing as shown.

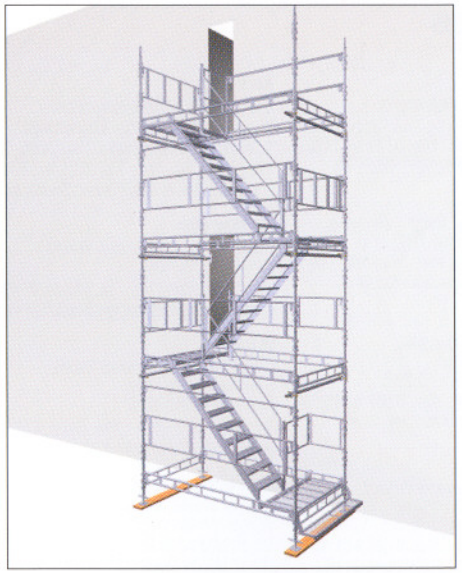
For side exit

Erector 1 is safely standing on landing and fits clip on post to inside ledger beam. Erector 2 standing on erecting platform at opposite end of tower hooked onto 1.605m ledger beam. Both operators then fit 2.16m guardrails or 2.16m guardrail frame into Clip On Post and standard ensuring locking catches are engaged. Means of access/egress at side of tower is then complete.

For end exit

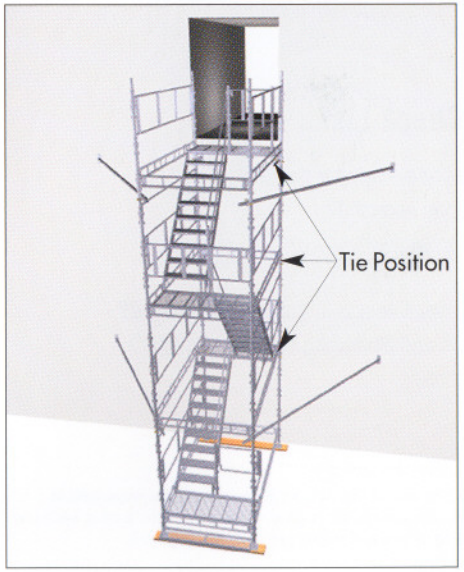
Erector 1 is safely standing on landing. Erector 2 standing on erecting platform at opposite end of tower clipped onto 1.605m ledger beam. Both operators then fit 3.0m guardrail frame at each side of tower. Remove 1.605m Guard from landing position. Means of access/egress at end of tower is then complete.

For dismantling the Stair Tower, the reverse of the above squence should be followed.



Shows construction of the HAKI Stair Tower with the 3.0m face parallel to the structure or scaffold (side exits).

Using tube & couplers, the tower should be tied to the structure below each lift position (except first lift) through both inside & outside standards.



Shows construction of the HAKI Stair Tower with the 1.605m face parallel to the structure or scaffold (end exits).

Using tube & couplers, the tower should be tied to the structure below each lift position (except first lift)
A. to inside standards, and
B. using diagonal tubes to outside standards.

Access Points

It is only possible to have a side access point (3.05m) in a 2.0m lift.
Access to/from end of tower (1.655m) is not restricted, but 1.605m Ledger Beam may have to be raised to create sufficient headroom when access lift is less than 2.0m.